

REMARKS

Claims 1-54 were pending in this application. By this Amendment, claims 14, 21, 27, 30, 32, 33, 35, 37-40, 42, and 43 have been amended, and claims 11-13, 22-26, 29, 31, 36, 41, and 44 have been canceled. Accordingly, claims 1-10, 14-21, 27-28, 30, 32-35, 37-40, 42-43, and 45-54 remain pending in this application.

The following discussion explains the substance of the amendments.

Claim 14 has been amended to change “the rib being sensed by the sensor” to “the rib adapted to be sensed by the sensor,” to recite “cylindrical” toner bottle, and the term “adjacent” has been added in two instances in connection with the recitation of the extent of the groove.

Claim 21 has been amended to recite that the toner discharge port is positioned on an outer circumferential surface of the toner bottle and to incorporate the recitations of canceled claims 23-25 including that the object is a rib formed at a predetermined position relative to the toner discharge port and aligned with the toner discharge portion in an axial direction along the cylindrical body portion, and further change from “rib being used” to “rib being configured for use.”

Claim 27 has been amended to depend from claim 21 and to incorporate the limitations of canceled intervening claim 26 including that the first end portion has a diameter smaller than a diameter of the cylindrical body portion. Further, claim 27 has been amended to specify that the first end portion, with the toner discharge port, is positioned axially outside the groove.

Claim 30 has been amended to depend from claim 27 and to incorporate the limitations of canceled intervening claim 29 including that the groove is a spiral groove.

Claim 32 has been amended to depend from claim 30 and to incorporate the limitations of canceled intervening claim 31 including that the continuous spiral groove comprises a plurality of groove portions that extend parallel to one another in a direction circumferentially along the outer surface of the cylindrical body portion.

Claim 33 has been amended to depend from claim 27.

Claim 35 has been amended to incorporate the limitations of canceled claim 36 including that the object is a rib.

Claims 37, 38 and 39 were amended to depend from claim 35.

Claim 40 has been amended to recite that the toner discharge port is positioned on an outer circumferential surface of the toner bottle, to change “a spiral groove” to “a groove comprising a spiral groove,” and to incorporate some of the limitations of canceled claim 41

including that the body portion is cylindrical and that the spiral groove extends continuously without breaks.

Claim 42 has been amended to depend from claim 40 and to incorporate the remaining limitations of canceled claim 41 not incorporated into claim 40, including that the spiral groove comprises a plurality of groove portions that extend parallel to one another in a direction circumferentially along the outer surface of the cylindrical body portion.

Claim 43 has been amended to change “the rib is capable of discriminating toner bottle type” to “the rib is capable of being used to discriminate toner bottle type.” Further claim 43 has been amended to specify that the first end portion has a diameter smaller than a diameter of the cylindrical body portion, and that the first end portion, with the toner discharge port, is positioned axially outside the groove.

Support for the amendments to the claims exists in Figures 2-7 of the Letters Patent and in column 4, line 59 – column 7, line 19 of the specification. For claims reciting an image forming apparatus, such as claims 18-20 and 34, exemplary support can be found in Figure 1 (along with the above-referenced disclosure).

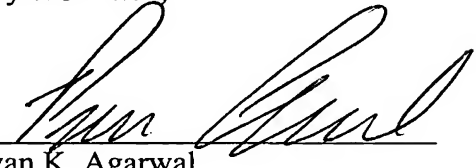
None of these amendments has been made to comply with 35 U.S.C. §§ 101, 102, 103 and 112. Therefore, none of these amendments has been made for reasons related to patentability. Rather, the changes have been made to prosecute certain claims of interest in the present application, and other claims may be pursued in one or more continuation applications.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date February 24, 2004

By



Pavan K. Agarwal
Registration No. 40,888

Attorney for Applicant

FOLEY & LARDNER
Customer Number: 22428

22428

PATENT TRADEMARK OFFICE

Telephone: (202) 945-6162

Facsimile: (202) 672-5399